Wolverine (Gulo gulo)

Species Status Statement.

Distribution

This natural distribution of this species encompasses the higher latitudes of North America, Europe, and Asia. Historical records in Utah (1841–1958, including at least 5 specimens from this period) show that it occurred at higher elevations through most of Utah (Barnes 1922, 1927; Durrant 1952) as far south as Mount Baldy (Piute County), Boulder Mountain (Garfield County), and the La Sal Mountains (San Juan County). Recent Utah records (2014–2016, tracks, photographs, and 1 physical specimen) demonstrate that it still (or perhaps again) exists in Utah, at least in the northern parts of the state in the Wasatch and Uinta mountains. It remains unknown whether Utah has a breeding population.

Table 1. Utah counties currently occupied by this species.

Wolverine	
DAGGETT	
RICH	
SUMMIT	

Abundance and Trends

This species requires large areas of undisturbed or minimally disturbed habitat. Even relatively dense, thriving populations of wolverines are numerically low in comparison with almost all other species of mammals. The species exhibited a downward population trend in western America in the late 19th century, continuing through at least the first half of the 20th century due primarily to over-trapping and habitat degradation. Wolverine populations are still recovering from those declines, and recent work has documented occupancy in suitable habitat across Montana, Idaho, Wyoming, and Washington.

Statement of Habitat Needs and Threats to the Species.

Habitat Needs

Wolverines require large areas with minimal disturbance. Though rangewide they utilize a wide variety of habitat types, in the southern parts of their range including Utah, wolverines inhabit mainly montane forests.

Threats to the Species

The principal threats to this species in the western United States, including Utah, are (1) illegal human persecution, (2) habitat alteration and disturbance, and (3) climate change resulting in declining snowpack. The natural rarity of the species exacerbates all of these threats. In addition, historical population reductions appear to have reduced wolverine genetic variability in the western United States.

Table 2. Summary of a statewide-scale threat assessment and prioritization completed in 2013 (UDWR 2015; Salafsky et al. 2008). Note that these threat rankings do not apply at the scale of local populations; a threat ranked medium at the overall, statewide level may be the most important threat to a local population. The threat assessment provides more information not presented here, including lower ranked threats, crucial data gaps, and definitions for all the threats and data gaps.

Wolverine	
High	
Excessive Harvest – Unregulated / Illegal	
Natural Rarity	
Medium	
Habitat Shifting and Alteration	
Loss of Genetic Exchange / Inbreeding	

Rationale for Designation.

Because of its requirements for vast areas of undisturbed or minimally disturbed habitat, its natural rarity, and ongoing threats (persecution, habitat alteration, and climate change), the species is vulnerable and a high conservational priority. As of April 2019, wolverine is under review for Endangered Species Act listing.

Economic Impacts of Sensitive Species Designation.

Sensitive species designation is intended to facilitate management of this species, which is required to prevent Endangered Species Act listing and lessen related economic impacts. In Utah, wolverine habitat is largely on U.S. Forest Service lands. A wolverine ESA listing would likely trigger regulatory consultation for routine forest management activities. Some studies have linked winter recreation to den disturbance, and consequently a listing could also lead to restriction on snowmobiles, helicopter skiing, ski resort expansion, and other backcountry snow travel. Finally, wolverines are occasionally captured incidentally in traps set for other furbearers. Therefore restrictions on trapping could also be enacted, including prohibitions on snares, conibears, and other trapping devices in wolverine habitat.

Literature Cited.

Barnes, C.T. 1922. Mammals of Utah. Bulletin of the University of Utah 12(15): 1–176.

Barnes, C.T. 1927. Utah mammals. Bulletin of the University of Utah 17(12): 1–183.

Durrant, S.D. 1952. Mammals of Utah[:] taxonomy and distribution. University of Kansas Publications, Museum of Natural History 6: 1–549.

Salafsky, N., D. Salzer, A.J. Stattersfield, C. Hilton-Taylor, R. Neugarten, S.H.M. Butchart, B. Collen, N. Cox, L.L. Master, S. O'Connor, and D. Wilkie. 2008. A standard lexicon for biodiversity conservation: unified classifications of threats and actions. Conservation Biology 22: 897–911.

Utah Division of Wildlife Resources [UDWR]. 2015. Utah Wildlife Action Plan: A plan for managing native wildlife species and their habitats to help prevent listings under the Endangered Species Act 2015-2025. Publication Number 15-14, 385 pp.